

FREDERICK COUNTY

SOLID WASTE

THE NEXT 20 YEARS

Typically a Solid Waste Plan needs to be reevaluated every 20 years or so. Citizens can change their habits significantly and technology can change drastically in such a time period. National and local priorities can be altered and changed legislatively with new rules for all.

1987

In 1987 we had a landfill with no tipping fee and no recycling. We had no Solid Waste Plan. There was little citizen involvement in discussions of solid waste planning for the future.

However in 1987 the landfill was filling up. This was inconvenient. In the next 4 years there was much activity and a new landfill was finally acquired and a new Solid Waste Plan was adopted. Recycling was established and a committee was formed to keep an eye on solid waste issues. It was dubbed SWAC (Solid Waste Advisory Committee). SWAC still exists today.

2007

Once again, as in 1987, we are quickly running out of landfill space. Acquiring a new landfill in 1987 was a three year effort. Odds are such an acquisition now could be even longer.

Today we are shipping trash out of the county at a cost of approximately \$1,000,000 per month. We are trying to conserve landfill space by exporting until we have a new solution for the future. Any time in the near future the facilities accepting our trash (currently a Virginia landfill) could raise their prices and we wouldn't have much negotiating leverage. This puts our county in a precarious situation.

As a result of the warnings from our Solid Waste Department the prior Board of County Commissioners voted to explore options other than a new landfill. The option they chose to investigate was a Waste to Energy incinerator. Arguments for waste to energy emphasize that it uses no fossil (non-renewable fuel). Also such technology has greatly improved since 1990. Unfortunately trash seems to be more renewable as our society becomes more affluent.

They commissioned a major study on the efficacy of such a facility. The study recommended that a Waste to Energy facility be built in Frederick County. To explore the concept even further the County developed a Request for Proposal and sent it out to potential bidders. Three proposals have been received by the present Board and are now being evaluated by our consultant engineers with supervision by our Solid Waste Director. The results of the proposal evaluations will be available this summer.

EUROPEAN TRIP

Recently in light of our current situation and as a member of Maryland's Northeast Solid Waste Authority we were invited to spend 7 days with a group touring 5 European cities operating Waste to Energy(WTE) plants. Mike Marshner, our Solid Waste director and I joined the group along with officials and Public Works Directors from other Maryland counties. The Maryland Environmental Service and Public Works directors from Ohio and Florida were members of the tour group. We were accompanied by engineers from the engineering group that is going to evaluate our Waste to Energy proposals. Our hosts were the Supervisors of the plants, local authorities and a representative of the

European Union Solid Waste Trade Authority. Without exception, they were very proud of their facilities and welcomed us cordially.

Mike Marshner and I intend to make a presentation on the trip to the Commissioners at the May 24th Worksession. We welcome citizens to attend or watch on TV. It will be in the 3rd Floor Meeting Room at Winchester Hall at 8:00 AM.

A quick summary of my major observations on the trip:

***All the plants were run by a board of citizens elected by their “Municipalities” (equivalent to small counties served by the facility). These plants were often located in or very close to residential neighborhoods. They conducted citizen tours regularly. Some even had glass walls so that passersby could observe them at anytime. They were not hidden from public view. In fact, the one plant that we observed under construction in Paris was on the Seine River within sight of the Eiffel Tower.**

***It was typical for a plant to provide “district heating” which is piped hot water to residences and industries for heating within a certain radius of the plant. A typical residential bill was 67 Euros (about \$100) per month. Virtually all also used the steam from their stack to drive turbines which generated electricity back into the power grid. This was a significant source of revenue for operations and was typically used to pay the debt service.**

***Regular maintenance was crucial to efficiency of operations. Virtually all Waste to Energy plants had a very large catalytic converter which facilitated more complete combustion but was an expensive component. They are apparently replaced every 8 years or so. Newer ones perform better.**

***In Denmark the tops of the towers were not hidden but instead decorated with lights---a Danish Tradition.**

***Most plants were co-located with recycling operations. Aluminum, metal, plastic and paper products were universally recycled. Such items as lumber, fishing nets and soil (Holland) were also recycled or source separated. Recycling receptacles were often located on street corners in the towns we visited.**

The European Union has established goals for member countries to phase out landfills for the disposal of solid waste. This has had the effect of accelerating technology improvements to waste to energy plants. Also, the European Union and their member countries have adopted the Kyoto Protocols and the CO2 emission reductions associated with those protocols. Unfortunately waste is a very renewable resource. I expect it won't be long before the United States will join Europe in adopting similar standards.

Since I was part of the Board of County Commissioners that first started recycling and initiated the first Solid Waste plan in 1990, I especially appreciate the increase of citizen involvement and responsibility in the last 15 years. People want to do the right thing. They often don't know how to do it. We gave them blue bins and many put some of their recyclable material in them.

But others still don't really know why we recycle. Witness recyclable products in your neighbor's household containers or trash cans. How often do you see trash cans full of recyclables such as newspapers, plastic bottles, aluminum cans, cardboard etc. How many people have source separation in the house? How about your own home? After 17 years of recycling we have a good ways to go.

We must look forward to the future with the ideals of today's culture and the tools we have to help us plan. Technologically we have a vast array of tools to communicate and we have a culture that increasingly wants to participate in creating a brighter future and a much cleaner and attractive

environment and sense of community. We are also aware that the possibility of increasing global warming is looming and may result in new rules and emission limits both nationally and internationally. Carbon Dioxide (CO₂) emissions are of increasing concern. The future is unsure and new constraints on our behavior patterns could severely curtail our comfortable and prosperous way of life. We may be more limited than ever on our use of fossil (not normally renewable via the Carbon Cycle) fuel such as coal, natural gas, and oil.

WHAT ARE WE DOING NOW TO RECYCLE?

In the area of recycling we are off to a good start. We have increased tipping fees to make it more costly to generate waste. These fees are also used to pay for additional recycling. New recycling programs have recently been added. In addition to paper, glass, plastic, aluminum, cardboard and junk mail (collected in the blue bins and 11 drop off centers) we have new programs.

These are:

Electronic equipment, TVs, and Computers – This has already diverted 1100 tons per month from the landfill .

Appliances – Refrigerators, Stoves, Dishwashers etc.

Scrap Metal

Foam – from mattresses to foam pillows to carpet underpayment

Batteries

Textiles – a partnership with the Frederick Union Rescue Mission-Accepting Clothing, Blankets, Purses, Shoes etc and in turn provided by the mission free to need families or at low prices in their thrift shop. Unusable items are sold for rags. Textiles typically account for 4% of the waste stream. This program is brand new and was launched on May 15, 2007.

Finally after you visit our Recycling Center everyone is invited to load a free truckload of mulch derived from pulverized yard waste on their way out.

Looking to next year. In July 2008 we will finish construction of our Transfer Station at Reich's Ford Rd. This will enable us to start single stream recycling. Single stream recycling has been very successful in many jurisdictions. With this approach households are provided with a large container for mixed recycling items only. This could accommodate some of the large packaging products we unfortunately have today. Trash would be separately picked up from a different smaller container. The single stream recycling trucks would deposit at the transfer station with no trash to separate out, only recyclables. At first towns could use single stream recycling to save costs since the cost per ton for the single stream of recyclables would be approximately ¼ of the cost of the tipping fee for waste. The county needs our legislative delegation to introduce franchising legislation to allow the county to set up franchise areas outside the towns to do the same. We will reintroduce a franchising bill again in January and do our best to convince our legislatures of its value to our recycling effort.

WHAT MUST BE DONE FOR THE FUTURE?

I believe this county needs to launch a 5 year program increasing real recycling/composting and waste reduction to levels at least twice our present rate. Presently we are recycling 36% of our waste stream. There must be definite goals for each of the next 5 years. I believe it should start with the Solid Waste Advisory Committee and they should be tasked to create *a new Solid Waste Plan.* Timetables and goals

must be established and measured at least yearly. Through subcommittees, support groups, citizen action groups etc, everyone can get involved. New energy has to be infused into such an effort and our youth must be involved as part of their curriculum, senior projects etc.

The school system must be involved with curriculum changes and with drastically improved recycling and conservation practices. Our county government needs to greatly improve its recycling. We must involve our citizens to the maximum in creating the goals and implementing the plan.

WHAT MUST WE DO RIGHT NOW (NEXT 5 MONTHS OR SO)

Unfortunately it will take time to educate and enlist people in doubling our recycling/composting/waste reduction totals. As discussed we will need to reward conservation and penalize waste. Pricing schedules will need to be established that make generating trash expensive. New recycling/composting options must be established. Increased public and private commitments must be made. This could take up to possibly 5 to 10 years to achieve the goals. It will take a continuing energetic level of support from our county government our school board and our citizens. Properly done it will provide an outstanding example to other counties. Already two of our border counties (Carroll and Howard) have already started similar initiatives.

In the meantime we must decide between a new landfill and a Waste to Energy facility. These appear to be the only practical alternatives to handle the 700 tons of waste we receive each day. Both a landfill and a Waste to Energy facility have finite useful lives. If we opt for a Waste to Energy facility I do not want to plan for its continual expansion as the county grows. I want to plan for its eventual demise with our long term plan for doubling recycling/composting/waste reduction gaining more momentum and public participation with each passing year.

I look forward to participation from our students (whose future we are talking about) and our citizens from all walks of our Frederick County life.

We need specific details on recycling/composting/reusing and waste reduction practices that you are aware of and where they are practiced. Your specific suggestions on how to implement such practices are also needed.

WE need specific details on Waste to Energy concerns and safeguards that you are aware of and how they have been practiced or remedied.

I have attached an example of a letter voicing very helpful specific concerns to be addressed when considering the results of our Waste to Energy proposal evaluations. These types of input are very helpful.

Our Solid Waste Advisory Committee meets monthly (it could meet more often). All meetings are open. The Commissioners all have email, of course. The Commissioners welcome public comment at all our work sessions and public hearings and forums (always before a vote is taken) and after any meeting on any subject

David Gray
County Commissioner

16 May 2007

